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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------------|------------------|
| 10/003,345 | 12/06/2001 | Jang Geun Oh | LT-0006 | 5261 |
| 34610 | 7590 | 09/21/2005 | | |
| FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153 | | | | |
| | | | EXAMINER ELAMIN, ABDELMONIEM I | |
| | | | ART UNIT 2116 | PAPER NUMBER |

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,345

Applicant(s)

OH, JANG GEUN

Examiner

A Elamin

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-23 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,8,9,12-15,18-23 and 26-30 is/are rejected.
- 7) ☒ Claim(s) 5-7,10,11,16,17 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 8-9, 12-15, 18-23, 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parrish, US. Pat. No. 6,704,879 in view of Suzuki et al, US. Pat. No. 5,88,004.

3. Claims 1, 12, 19, 21, 26, Parrish an apparatus having a CPU [Fig. 1] wherein the improvement comprises:

a clock generator generating a first clock signal for the CPU [*not shown but this should be the case*], and a second clock generator generating a second clock, wherein the first and second clock signals are two distinct clock signals and have different frequencies [*Fig. 1 and related disclosure*]; and

a bridge controller [*106 of Fig. 1*] comprising a logic device for adjusting the second clock signal based on a power source and independent of the first clock signal [*abstract, col. 1, lines 35-50*].

Parrish fails to teach a clock generator generating both a first clock and a second clock.

Suzuki teaches a clock generator circuit generating a first clock [*CLK1 of Fig. 6*] and a second clock [*CLK2 of Fig. 1*], wherein the first and second clock signals are two distinct clock signals and have different frequencies [*abstract*].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Parrish to include a clock generator generating both a first clock and a second clock, because it eliminates the need for having two clock generators and hence reduces the unit price of the chip [*see Suzuki, col. 17, 52-65*].

4. Claims 2, 13, Parrish teaches the bridge controller controls a clock speed of a bus for data communication among a plurality of peripheral devices of the apparatus [*Fig. 1*].

5. Claims 3, 18, 20, 22, 27, Parrish teaches the power source is one of AC power mode and battery power mode [*130, 129 of Fig. 1*].

6. Claims 8, Parrish teaches the logic device increases a frequency of the second clock signal in an AC power mode and outputs the second clock signal without a frequency adjustment in a battery power mode [*abstract*].

7. Claim 9, Parrish teaches the logic device outputs the second clock signal in a battery power mode without a frequency adjustment [*abstract*].

8. Claims 14-15, 23, Suzuki teaches the clock adjustor Es a phase locked loop (PLL) [*see Suzuki, Fig. 6 and related disclosure*].

9. Claims 28, Parrish teaches the second higher frequency clock signal is selectively output independent of the first higher frequency clock signal, and wherein the second higher frequency clock signal is selectively output by being output as is or reduced according to the power mode signal [*abstract, col. 1, lines 35-50*].

10. Claims 29, Parrish teaches the first device is a processor and the second device is a bridge controller [*Fig. 1*].

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11. Claims 30, Parrish teaches the second higher frequency clock signal has at least two different frequencies selected in accordance with the power mode signal [*abstract, col. 1, lines 35-50*].

Allowable Subject Matter

12. Claims 5-7, 10-11, 16-17, 25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

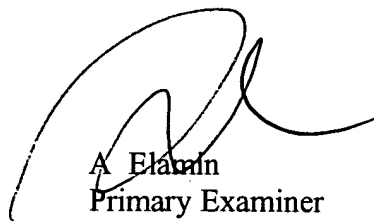
Any inquiry concerning this communication or earlier communications from the examiner should be directed to A Elamin whose telephone number is (571) 272-3674. The examiner can normally be reached on MON-FRI 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A. Elamin
Primary Examiner
Art Unit 2116

September 19, 2005